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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,265	12/31/2003	William Robert Ross	122355-1	1714

7590 01/11/2005

Berkeley Law and Technology Group
680 NW Altishin Place
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EXAMINER	
SONG, HOON K	

ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/750,265	ROSS ET AL.	
	Examiner	Art Unit	
	Hoon Song	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/31/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

On page 3 line 2, "claim d" should read --claimed--; on line 25, "xampl" should read –example-- and "us ful" should read --useful--.

Similar informalities exist throughout the specification. Appropriate revision/correction is required.

Claim Objections

Claims 13 and 16 are objected to because of the following informalities:

In claim 13, on line 1, "wh rein" should read --wherein--, "on" should read --one--, "compris s" should read --comprises--.

In claim 16, on line 6, "panels" should read --panel--.

Similar informalities exist throughout the claims. Appropriate revision/correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5 and 7-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Petrick et al. (US 6404852).

Regarding claim 1, Petrick teaches a method of reading imaging data stored in a detector panel, comprising:

determining an area of interest for said panel (a field of view, column 4 line 16-22), wherein said panel comprises multiple pixel rows (figure 2), said area of interest comprising more than two and less than all of said multiple pixel rows of said panel (figure 2); and

reading at least a portion of said data from said determined area of interest (column 5 line 12-22).

Regarding claims 3 and 27, Petrick teaches said panel is divided with one half of said multiple pixel rows on one half of said panel and another half of said multiple pixel rows on a remaining half of said panel (column 3 line 61).

Regarding claims 4 and 28, Petrick teaches said determined area of interested is also divided with one half on half of said panel and another half on a remaining half of said panel (figure 2 and column 3 line 61).

Regarding claims 5 and 29, Petrick teaches data in said determined area of interest is read in parallel in multiple immediately adjacent rows (figure 2, direction of scan).

Regarding claim 7, Petrick teaches said data is read from directly opposing rows in parallel (column 3 line 62).

Regarding claim 8, Petrick teaches determining said area of interest based at least in part on the dimensions of a subject to be imaged (patient is bigger than the detector panel).

Regarding claim 9, Petrick teaches data from separate panels are read substantially concurrently (column 4 line 56).

Regarding claim 10, Petrick teaches scrubbing said panel by reading out data from rows outside said determined area of interest (column 5 line 28).

Regarding claim 11, Petrick teaches said scrubbing takes place a group of adjacent rows at a time (outside of the field of view, column 5 line 28).

Regarding claim 12, Petrick teaches a method of imaging, comprising:

emitting radiation from one or more radiation sources (15) toward a subject (18) situated in front of a set of panel detectors (26);

as a result of said emitted radiation, at least a portion of at least some of said set of panel detectors having stored data related to said subject (image data);

reading less than all of said stored data related to said subject from said set of panels (reading image data from field of view (e.g. row 129), column 5 line 10-34).

Regarding claims 13,17 and 21, Petrick teaches said one or more radiation sources comprises one or more x-ray sources (13).

Regarding claims 14, 18 and 22, Petrick teaches said panel detectors comprises flat panel amorphous silicon panels (figure 3).

Regarding claims 15 and 19, Petrick teaches reading less than all of said stored data comprises:

determining an area of interest (field of view, column 4 line 16-22), wherein said area of interest comprises an area of said panel detectors less than the entire area of said panel detectors (figure 2); and

reading at least a portion of the data contained in said determined area of interest (column 5 line 10).

Regarding claim 16, Petrick teaches a method of imaging, comprising:

emitting radiation from one or more radiation sources towards a subject situated in front of a set of panel detectors so that only a portion of at least some of said set of panel detectors (field of view) are able to store signals related to said subject (figure 1 and 2);

reading said stored signals related to said subject from said portion of at least some of said set of panel detectors (column 5 line 10).

Regarding claim 20, Petrick teaches a system, comprising:

a least one radiation source (15);

a detector array (26);

a computer coupled to said detector array, said computer configured to, in operation:

determine an area of interest for said detector array (column 4 line 16-22), said determined area of interest being less than said entire detector array (field of view, figure 2); and

read data from said determined area of interest (column 5 line 10).

Regarding claim 23, Petrick teaches said system is capable of producing radiological images of a human subjects (18).

Regarding claim 24, Petrick teaches said computer is further configured to, in determine said area of interest base at least in part on the dimensions of said subject (column 4 line 16-22).

Regarding claim 25, Petrick teaches said computer is further configured to, in operation:

scrub at least the portion of said detector array outside said determined area of interest (column 5 line 28).

Regarding claim 26, Petrick teaches an article comprising:

a storage medium (computer) having stored thereon instructions that, when executed, results in a method of reading imaging data stored in a detector panel (26):

determining an area of interest for said panel, wherein said panel comprises multiple pixel rows, said area of interest comprising more than two and less than all of said multiple pixel rows of said panel (field of view, figure 2); and

reading at least a portion of said data from said determined area of interest (column 5 line 10).

Claims 1, 12, 16, 20 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by He et al. (US 6198791B1).

Regarding claims 1, 12, 16, 20 and 26, Petrick teaches a CT system, comprising:

a least one radiation source (14);

a detector array (16);

a computer (24) coupled to said detector array, said computer configured to, in operation:

determine an area of interest for said detector array, said determined area of interest being less than said entire detector array (field of view, column 5 line 3 and table 1); and

read data from said determined area of interest (column 4 line 50).

Claim Rejections - 35 USC § 103

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petrick et al. in view of He et al.

Regarding claim 2, Petrick fails to teach said determined area of interest comprises less than half of all of said multiple pixel rows of said panel.

He teaches a field of view having less than half of all of detector panel (figure 9b and 9c).

It would have been obvious to one of ordinary skill in the art at the time of the invention to set the field of view of Petrick to be less than half of all of the multiple pixel rows of the panel as taught by He, since selecting of smaller field of view would improve read out efficiency for smaller imaging area.

Claims 6 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrick et al. in view of Aufrichtig et al. (US 6623161B2)

Regarding claims 6 and 30, Petrick fails to teach data in said determined area of interest is read by row, starting from the center of said panel and reading towards rows remote from said center.

Aufrichtig teaches a method of reading x-ray data starting from a center of a detector and reading towards rows remote from the center (figure 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to read the x-ray data of Petrick with the method of reading as taught by Aufrichtig, since the method of Aufrichtig would generate useful image information quickly than reading from remote rows to center.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoon Song whose telephone number is (571) 272-2494. The examiner can normally be reached on 8:30 AM - 5 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (571) 272 - 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAVID V. BRUCE
PRIMARY EXAMINER

HKS

11/5/05
HKS